

# SCIENCE COMMUNICATION BASICS



*for*  
FOREST SERVICE  
R&D SCIENTISTS

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# HELLO AND WELCOME!

*I'm Cindy Miner.*

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# IMPORTANCE OF *Science Communications*

R&D grounds the agency in world-class science and technology to advance the FS mission.

## *Science communication:*

- Shines light on the relevancy of research
- Delivers research concepts, findings, and tools
- Makes a difference in policy, management, and public understanding



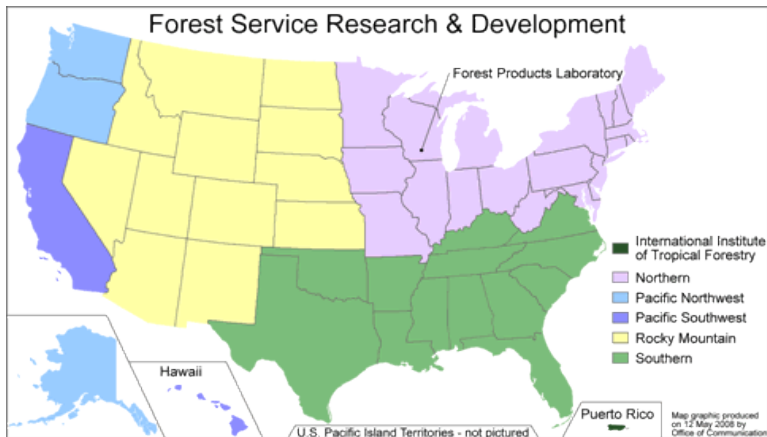
# COMMUNICATION *Basics*

- Get to know your Communications AD and staff
- Why communicate?
- Models and theories
- Strategic communication planning



# GET TO KNOW YOUR COMMS STAFF

*The Sooner the Better*



- Advice and strategic guidance
- Agency policy, manual direction, and guidelines
- Sensitive, controversial, or high-impact findings, publications, or products
- News media interviews and press releases
- Publications, videos, web content, and other products
- Social media (Facebook, Twitter, YouTube, Instagram)
- Technology transfer and conservation education



# WHY SHOULD SCIENTISTS COMMUNICATE?

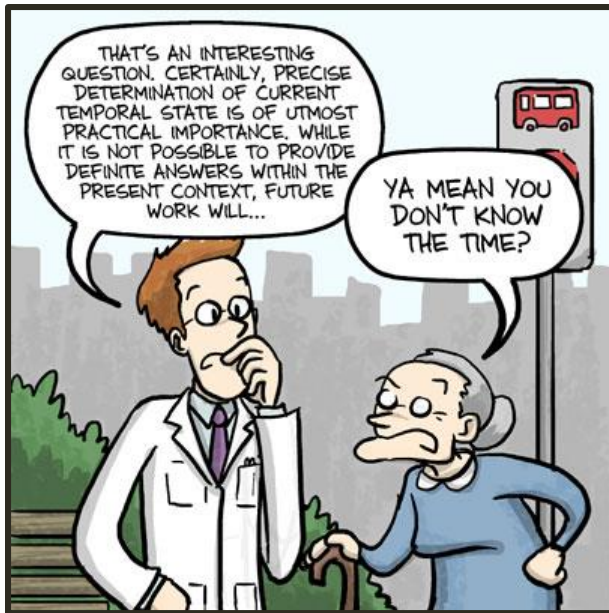
# WHY *Communicate?*

- Encourage behaviors
  - Mitigating fire risk
- Transfer technology
  - Tools with high impact
- Use in management and policy
  - Walking the advocacy line
- Change attitudes
  - Through compelling storytelling



# THINKING ABOUT HOW YOU COMMUNICATE

*Helps you have the “right” answer*



Nature.com

Right question,  
wrong answer?

# COMMUNICATING *Helps You...*

- Stand out
- Lead out
- Make a difference!

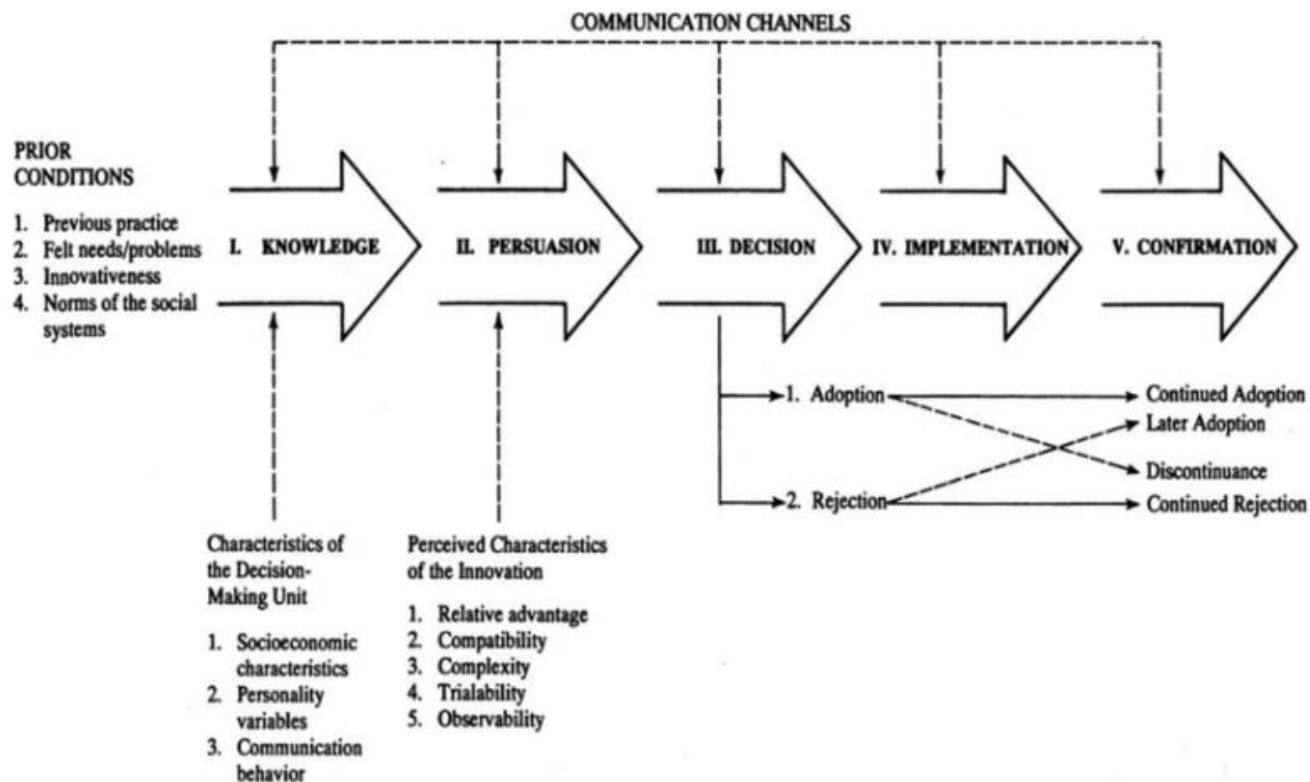


# COMMUNICATION *Models*

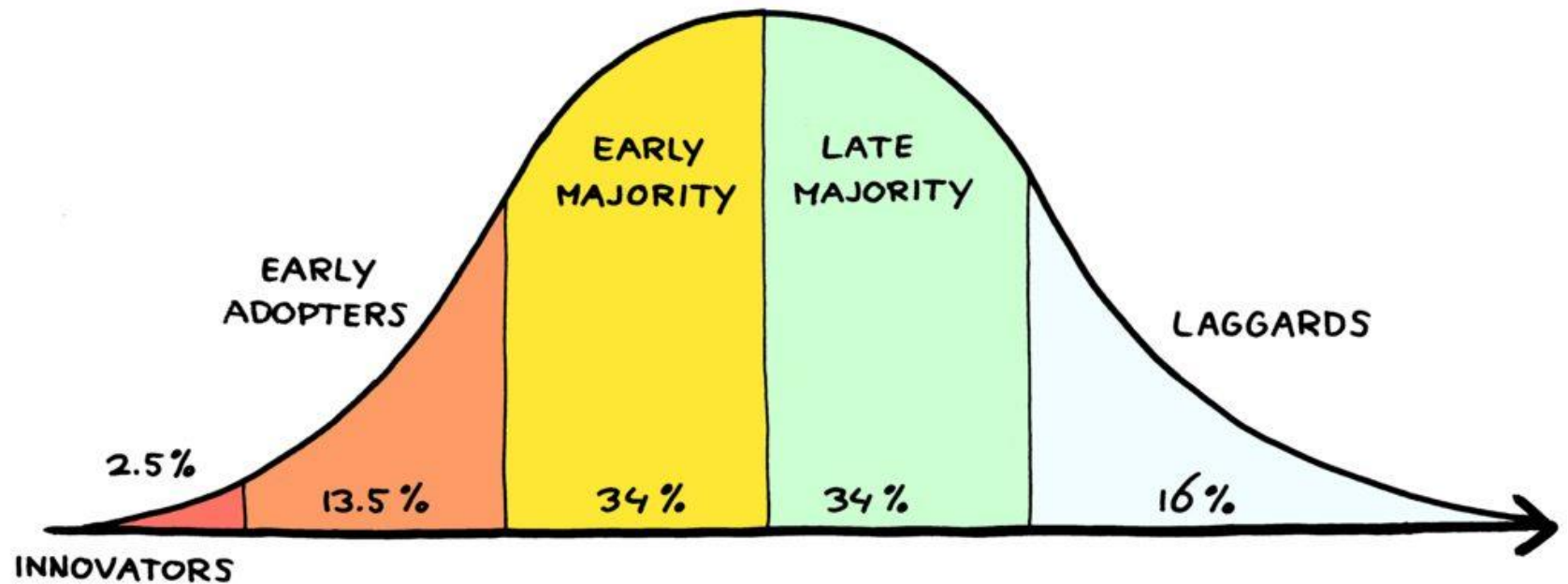


- One-way delivery of messages
- Two-way exchange of messages
- **Diffusion:** toward use of new concept, practice, or information
- **Education:** long-term process to transfer knowledge
- **Dialogue:** build relationships and networks that promote use of science

# DIFFUSION *Is A Process*



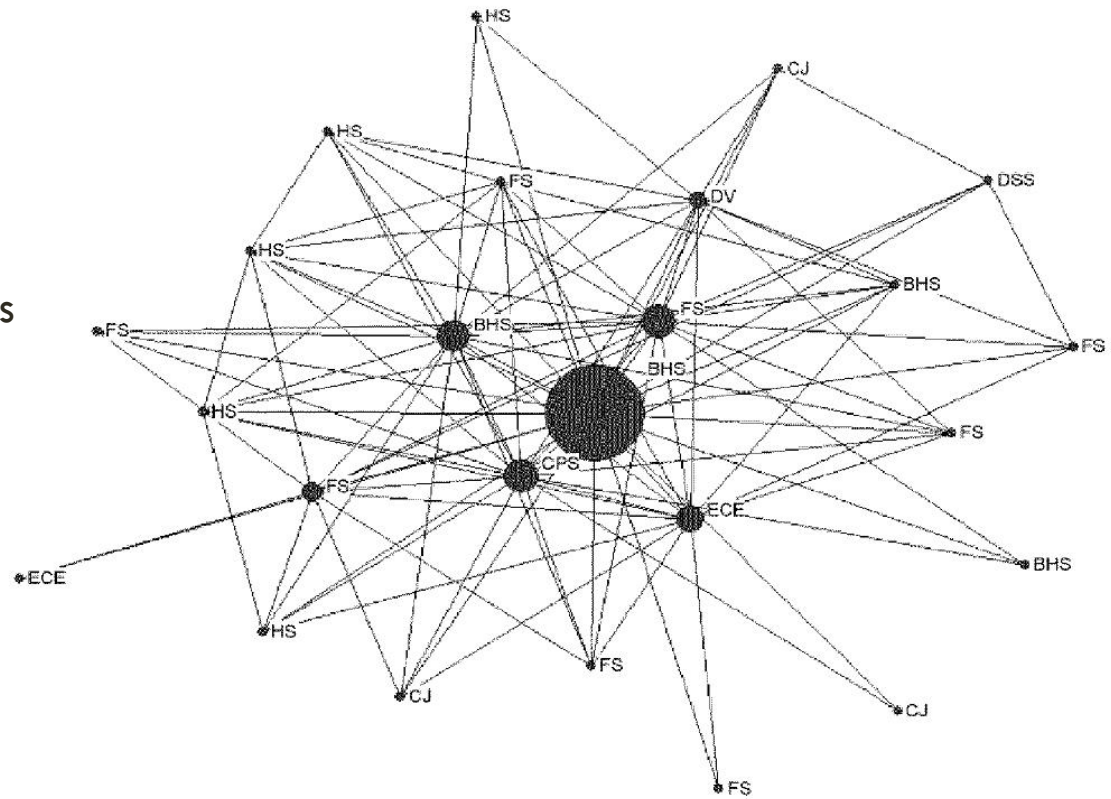
# WE ALL ADOPT AT *Different Rates*



# SOCIAL *Networks*

## Nodes are individuals

- Influencers
- Well-connected
- Good communicators
- Networkers



# SCIENTISTS AND *Community Dialogue*





# STRATEGIC PLANNING

*Be intentional*

# SET YOUR *Intentions*



GOAL \* PLAN \* SUCCESS

## 1. *Assess theories and models*

- Pick favorite
- Adapt
- Shift depend on situation
- Update

## 2. *Approach strategically*

- Plan with big picture in mind
- Bring in communication experts

## 3. *Connect*

- Through campaigns, presentations, outreach, different platforms, etc.
- Examples to come

# STRATEGIC COMMUNICATION *Plan Components*

- Purpose and scope
- Context
- Audience
- Goals and objectives
- Key Messages
- Work plan and tactics
- Budget
- Evaluating Results



# EVALUATE WITH *Metrics*

- Publication downloads or requests (Treesearch)
- Scientist profile views (Forest Service profile, Research Gate, Google Scholar)
- Queries for technical information and collaboration
- Interview requests
- Social media interactions and traffic
- Email listservs
- Solicited audience feedback



# READINGS

- COMPASS “Message Box”: online tool to help hone messages for your audience ([www.compassciComm.org/message-box-workbook](http://www.compassciComm.org/message-box-workbook))
- Experimental evidence for tipping points in social convention (2018) Science, Centola et al.  
(<http://science.sciencemag.org/content/360/6393/1116>)
- *Environmental Communication: Skills and Principles for Natural Resource Managers, Scientists, and Engineers*, 2<sup>nd</sup> Edition (2010), Richard Jurin et al.
- *Communicating Forest Science* (2014), Cindy Miner et al.
- *Diffusion of Innovations*, 5<sup>th</sup> Edition (2003), Everett M. Rogers
- Office of Communication “Hub” (<https://usdagcc.sharepoint.com/sites/fs-wo-oc/SitePages/Home.aspx>)

